

AMENDMENT TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-93 (canceled).

94 . (currently amended) The pharmaceutical composition comprising an ApoA-I agonist and a pharmaceutically acceptable carrier, excipient or diluent; wherein the ApoA-I agonist is in the form of an ApoA-I agonist-lipid complex, said complex comprising ~~an~~ the ApoA-I agonist and a lipid; wherein the ApoA-I agonist comprises:
a 22 to 29-residue peptide or peptide analogue which forms an amphipathic α -helix in the presence of lipids and which comprises formula (I):

$Z_1-X_1-X_2-X_3-X_4-X_5-X_6-X_7-X_8-X_9-X_{10}-X_{11}-X_{12}-X_{13}-X_{14}-X_{15}-X_{16}-X_{17}-X_{18}-X_{19}-X_{20}-X_{21}-X_{22}-X_{23}-Z_2$

or a pharmaceutically acceptable salt thereof, wherein:

X_1 is Pro (P), Ala (A), Gly (G), Gln (Q), Asn (N), Asp (D) or D-Pro (p);

X_2 is an aliphatic residue;

X_3 is Leu (L) or Phe (F);

X_4 is an acidic residue;

X_5 is Leu (L) or Phe (F);

X_6 is Leu (L) or Phe (F);

X_7 is a hydrophilic residue;

X_8 is an acidic or a basic residue;

X_9 is Leu (L) or Gly (G);

X_{10} is Leu (L), Trp (W) or Gly (G);

X_{11} is a hydrophilic residue;

X_{12} is a hydrophilic residue;

X_{13} is Gly (G) or an aliphatic residue;

X_{14} is Leu (L), Trp (W), Gly (G) or Nal;

X_{15} is a hydrophilic residue;

X_{16} is a hydrophobic residue;

X₁₇ is a hydrophobic residue;

X₁₈ is Gln (Q), Asn (N) or a basic residue;

X₁₉ is Gln (Q), Asn (N) or a basic residue;

X₂₀ is a basic residue;

X₂₁ is an aliphatic residue;

X₂₂ is a basic residue;

X₂₃ is absent or a basic residue;

Z₁ is H₂N- or RC(O)NR'-;

Z₂ is -C(O)NRR, -C(O)OR or -C(O)OH or a salt thereof;

each R is independently -H, (C₁-C₆) alkyl, (C₁-C₆) alkenyl, (C₁-C₆) alkynyl, (C₅-C₂₀) aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a 1 to 7-residue peptide or peptide analogue in which one or more bonds between residues 1-7 are independently a substituted amide, an isostere of an amide or an amide mimetic;

each R' is independently -H, (C₁-C₆) alkyl, (C₁-C₆) alkenyl, (C₁-C₆) alkynyl, (C₅-C₂₀) aryl, (C₆-C₂₆) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl; and

each "—" between residues X₁ through X₂₃ independently designates an amide linkage, a substituted amide linkage, an isostere of an amide or an amide mimetic;

or

a N-terminally blocked form, a C-terminally blocked form, or an N- and C-terminally blocked form of formula (I).

95. (previously presented) The pharmaceutical composition of Claim 94 wherein X₇ of the ApoA-I agonist is a basic residue.

96. (previously presented) The pharmaceutical composition of Claim 94 wherein X₃, X₆, X₉ and X₁₀ of the ApoA-I agonist are hydrophobic residues.

97. (previously presented) The pharmaceutical composition of Claim 94 wherein the ApoA-I agonist is a 22-23 residue peptide or peptide analogue according to formula (I).

98. (currently amended) The pharmaceutical composition of Claim 97 ~~comprising an ApoA-I agonist according to formula (I)~~ wherein:

the “—” between residues X₁ through X₂₃ designates -C(O)NH-;

Z₁ is H₂N-; and

Z₂ is -C(O)OH or a salt thereof.

99. (currently amended) The pharmaceutical composition of Claim 98 ~~comprising an ApoA-I agonist according to formula (I)~~ wherein:

X₁ is Pro (P), Ala (A), Gly (G), Asn (N), Gln (Q), Asp (D) or D-Pro (p);

X₂ is Ala (A), Val (V) or Leu (L);

X₃ is Leu (L) or Phe (F);

X₄ is Asp (D) or Glu (E);

X₅ is Leu (L) or Phe (F);

X₆ is Leu (L) or Phe (F);

X₇ is Lys (K), Arg (R) or Orn;

X₈ is Asp (D) or Glu (E);

X₉ is Leu (L) or Gly (G);

X₁₀ is Leu (L), Trp (W) or Gly (G);

X₁₁ is Asn (N) or Gln (Q);

X₁₂ is Glu (E) or Asp (D);

X₁₃ is Gly (G), Leu (L) or Aib;

X₁₄ is Leu (L), Nal, Trp (W) or Gly (G);

X₁₅ is Asp (D) or Glu (E);

X₁₆ is Ala (A), Nal, Trp (W), Leu (L), Phe (F) or Gly (G);

X₁₇ is Gly (G), Leu (L) or Nal;

X₁₈ is Gln (Q), Asn (N), Lys (K) or Orn;

X₁₉ is Gln (Q), Asn (N), Lys (K) or Orn;

X₂₀ is Lys (K) or Orn;

X₂₁ is Leu (L);

X₂₂ is Lys (K) or Orn; and X₂₃ is absent or Lys (K).

100. (previously presented) The pharmaceutical composition of Claim 99 wherein X₂₃ of the ApoA-I agonist is absent.

102. (Currently amended)) The pharmaceutical composition of Claim 94 ~~comprising an ApoA-I agonist according to formula (I)~~ wherein one of X₁₈ or X₁₉ is Gln (Q) or Asn (N) and the other of X₁₈ or X₁₉ is Lys (K) or Orn.

Claim 102 (canceled).

103. (currently amended) The pharmaceutical composition of Claim 94 ~~comprising an ApoA-I agonist~~ wherein the peptide or peptide analog is selected from the group consisting of:

peptide 1	PVLDLFRELLNELLEZLKQKLK	(SEQ ID NO:1),
peptide 2	GVLDLFRELLNELLEALKQKLKK	(SEQ ID NO:2),
peptide 3	PVLDLFRELLNELLEWLKQKLK	(SEQ ID NO:3),
peptide 4	PVLDLFRELLNELLEALKQKLK	(SEQ ID NO:4),
peptide 5	pVLDLFRELLNELLEALKQKLKK	(SEQ ID NO:5),
peptide 6	PVLDLFRELLNEXLEALKQKLK	(SEQ ID NO:6),
peptide 7	PVLDLFKELLNELLEALKQKLK	(SEQ ID NO:7),
peptide 8	PVLDLFRELLNEGLEALKQKLK	(SEQ ID NO:8),
peptide 9	PVLDLFRELGNELLEALKQKLK	(SEQ ID NO:9),
peptide 10	PVLDLFRELLNELLEAZKQKLK	(SEQ ID NO:10),
peptide 11	PVLDLFKELLQELLEALKQKLK	(SEQ ID NO:11),
peptide 12	PVLDLFRELLNELLEAGKQKLK	(SEQ ID NO:12),
peptide 13	GVLDLFRELLNEGLEALKQKLK	(SEQ ID NO:13),
peptide 14	PVLDLFRELLNELLEALOQOLO	(SEQ ID NO:14),
peptide 15	PVLDLFRELWNELLEALKQKLK	(SEQ ID NO:15),
peptide 16	PVLDLLRELLNELLEALKQKLK	(SEQ ID NO:16),
peptide 17	PVLELFKELLQELLEALKQKLK	(SEQ ID NO:17),
peptide 18	GVLDLFRELLNELLEALKQKLK	(SEQ ID NO:18),

peptide 19	pVLDLFRELLNEGLEALKQKCLK	(SEQ ID NO:19),
peptide 20	PVLDLFREGLNELLEALKQKCLK	(SEQ ID NO:20),
peptide 21	pVLDLFRELLNELLEALKQKCLK	(SEQ ID NO:21),
peptide 22	PVLDLFRELLNELLEGLKQKCLK	(SEQ ID NO:22),
peptide 23	PLLELFKELLQELLEALKQKCLK	(SEQ ID NO:23),
peptide 24	PVLDLFRELLNELLEALQKKCLK	(SEQ ID NO:24),
peptide 25	PVLDFFRELLNEXLEALKQKCLK	(SEQ ID NO:25),
peptide 26	PVLDLFRELLNELLELLKQKCLK	(SEQ ID NO:26),
peptide 27	PVLDLFRELLNELZEALKQKCLK	(SEQ ID NO:27),
peptide 28	PVLDLFRELLNELWEALKQKCLK	(SEQ ID NO:28),
peptide 29	AVLDLFRELLNELLEALKQKCLK	(SEQ ID NO:29),
peptide 123	QVLDLFRELLNELLEALKQKCLK	(SEQ ID NO:123),
peptide 124	PVLDLFOELLNELLEALOQOLO	(SEQ ID NO:124),
peptide 125	NVLDLFRELLNELLEALKQKCLK	(SEQ ID NO:125),
peptide 126	PVLDLFRELLNELGEALKQKCLK	(SEQ ID NO:126),
peptide 127	PVLDLFRELLNELLELLKQKCLK	(SEQ ID NO:127),
peptide 128	PVLDLFRELLNELLEFLKQKCLK	(SEQ ID NO:128),
peptide 129	PVLELFNDLLRELLEALQKKCLK	(SEQ ID NO:129),
peptide 130	PVLELFNDLLRELLEALKQKCLK	(SEQ ID NO:130),
peptide 131	PVLELFKELLNELLDALRQKCLK	(SEQ ID NO: 131),
peptide 132	PVLDLFRELLENLLEALQKKCLK	(SEQ ID NO:132),
peptide 133	PVLELFFERLLEDLLQALNKKCLK	(SEQ ID NO:133),
peptide 134	PVLELFFERLLEDLLKALNQKCLK	(SEQ ID NO:134),
peptide 135	DVLDLFRELLNELLEALKQKCLK	(SEQ ID NO:135),
peptide 136	PALELFKDLLQELLEALKQKCLK	(SEQ ID NO:136),
peptide 137	PVLDLFRELLNEGLEAZKQKCLK	(SEQ ID NO:137),
peptide 138	PVLDLFRELLNEGLEWLKQKCLK	(SEQ ID NO:138),
peptide 139	PVLDLFRELWNEGLEALKQKCLK	(SEQ ID NO:139),
peptide 140	PVLDLFRELLNEGLEALOQOLO	(SEQ ID NO:140),
peptide 141	PVLDFFRELLNEGLEALKQKCLK	(SEQ ID NO:141), and
peptide 142	PVLELFRELLNEGLEALKQKCLK	(SEQ ID NO:142),

and the N-terminal acylated and/or C-terminal amidated or esterified forms thereof, wherein X is Aib; Z is Nal; and O is Orn.

104. (currently amended) The pharmaceutical composition of Claim 103 ~~comprising an ApoA-I agonist~~ wherein the peptide or peptide analog ApoA-I agonist that is SEQ ID NO: 4.

Claims 105-109 (canceled).

110. (currently amended) The pharmaceutical composition of Claim 94 ~~comprising an ApoA-I agonist~~ wherein X₃ is Leu (L) or Phe (F), X₆ is Phe (F), X₉ is Leu (L) or Gly (G), and X₁₀ is Leu (L), Trp (W) or Gly (G).

Claims 111-127 (canceled).